U. S. PATENT OFFICE.

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Skates.

J. A. DE BRAME, OF NEW YORK, N. Y.,

ASSIGNOR TO HIMSELF AND BENJAMIN GURNEY, OF SAID NEW YORK.

Letters Patent No. 1,491, *dated June* 4, 1861.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known, that I, J. A. De Brame, of New York, in the county of New York and State of New York, have invented a new and useful improvement in Fastenings for Skates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 shows a bottom view of a skate, having my improved fastening applied to it.

Figure 2 is a longitudinal section, through figure 1, in the vertical planes indicated by the course of red lines *x x* thereon, showing the improved device for fastening the skate to the boot at the heel.

Figure 3 is a perspective view of the heel plate, which is secured to the heel of the boot.

Figure 4 is a view showing the plate and its fastenings, which are secured to the heel part of the skate iron.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in securing skates to the soles of boots, wherein sliding metallic buttons, which are affixed to the skates, are made to catch into slots in plates, which are secured to the bottom of the boots, thereby securing the skates to the boots without straps or clamps as hitherto, as will be hereinafter fully explained.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

De Brame's Improvement in Skates.

A is a common skate iron, having elevations at *a* and at *b*, which represent respectively the ball and heel parts of the skate. On the part *a* a flat plate B is suitably secured, which should be sufficiently large to form a good bearing for the front part of the foot. One or more hooked projections *c* project from the top of plate B, and curve backwards, or towards the heel part of the skate, as shown in figure 2 of the drawings. This hook *c* catches into a recess *d*, formed in a plate C, which is secured to the sole of the boot, and, when the skate is attached to the boot, and the hook introduced into the recess in plate C, this hook *c* will prevent the boot from slipping forward on the plate C, at the same time the hook *c* will secure the skate firmly to the front part of the boot.

A plate D is suitably secured on the heel elevation *b*, and this plate should be of a suitable size for supporting the heel of the boot. The top surface of this plate D is flat like plate B, and in the front part of the plate D a heel pin E is fixed, which projects up perpendicularly from plate D, and enters a hole in the heel of the boot when the skate is on. A longitudinal dove-tail slot *e*, shown in figures 2 and 4 of the drawings, is formed in the upper surface of plate D, which extends through this plate, and in this slot *e* is a sliding block *f*, two of the edges or sides of which are bevelled to fit the corresponding bevelled sides of the slot *e*; this keeps the block *f* in its slot, and allows this block to be moved longitudinally back and forth in its slot. On the upper surface of the sliding block *f*, and projecting up therefrom a suitable distance, is a metallic button *g*, leaving a small neck *g'*, shown in figures 2 and 4 of the drawings.

This button and its neck should be made very strong, and securely fixed to the sliding block *f*. A pin *h*, having a suitable head *h'* on one end, and male screw thread on the other end, is screwed into the back of block *f*; and the stem of the screw passes loosely through the metal portion D, as shown in figure 2, thus having the button *h'* outside of the plate *d*. Now, by means of this headed pin *h*, the block *f* may be moved back and forth in its slot, or, by turning the pin *h*, the screw working in block *f*; this block may be adjusted longitudinally. A strong helical spring *i* is coiled around that portion of pin *h* which is between block *f* and fixed plate *d*, which spring will forcibly move the block *f* forward when it is drawn back and released.

A heel plate G, which may be made quite narrow, is secured to the bottom of the heel of the boot, in the middle of the heel, and through this plate a slot *k* is cut in a direction with the length of the plate, the rear end of which slot terminates in an enlarged hole *n* of sufficient size to freely admit the button *g* on block *f*, and the slot *k* is made large enough to admit only the neck *g'* of this button *g*; thus, when the button *g* is passed through hole *n* in plate G, the neck of this button *g'* will slip into the slot *k*. The upper surface of plate G should be inclined towards its rear end, so that, when the button head *g* is passed through this plate and moved forwards, the head will draw the plate G and D tightly together.

In putting the improved skate on the boot, having plates C and G secured to

its sole, as above described, the hook c is first passed into the hole d through plate C; the heel of the skate is now pressed up against the heel of the boot, and pin E is inserted into its hole. The pin *h* is drawn backwards, moving the block *f* and button *g* with it until the button *g* passes through hole *s*, through plate G, when the pin *h* is released, and the spring *i* allowed to force the neck of the button *g* forward, and into the slot *k* in plate G; the button *g* will thus secure the heel part of the skate to the heel of the boot. To take off the skate, it is only necessary to draw pin *h* back until the button *g* will slip out of the hole *s* in plate G; then detach hook c from plate C, when the skate will come off.

By using the sliding button *g*, I dispense with spring catches or latches, which have hitherto been used, and their attending objections, and I am enabled to make a very secure fastening, which is simple and easily operated; and where the heels of boots are very low, as in the case of ladies' boots, and the common latch fastening could not be used, my improved fastening will answer a very good purpose for securing the skates at the heels.

I am aware that fixed button fastenings have been used in conjunction with other fastenings for securing skates to the soles of boots, and I, therefore, do not claim broadly button fastenings, which are fixed on the skate plates or other part or parts of a skate.

But what I do claim as new, and desire to secure by Letters Patent, is—

The button fastening *g*, or its equivalent, when secured to a sliding plate *f*, which works in a groove in the skate plate G, and is operated by a pin *h*, substantially as and for the purposes herein set forth.

J. A. DE BRAME.

Witnesses:

M. M. Livingston,

C. W. Cowtan.

J. A. De Brune,

Skate Fastening,

No. 32,195. Patented June 4, 1861.

Fig 1.

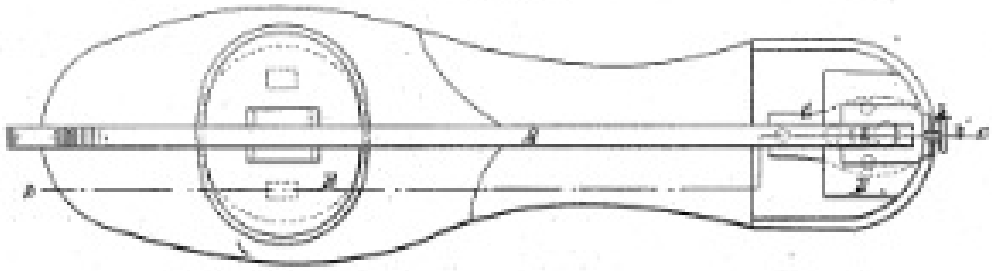

Fig 2

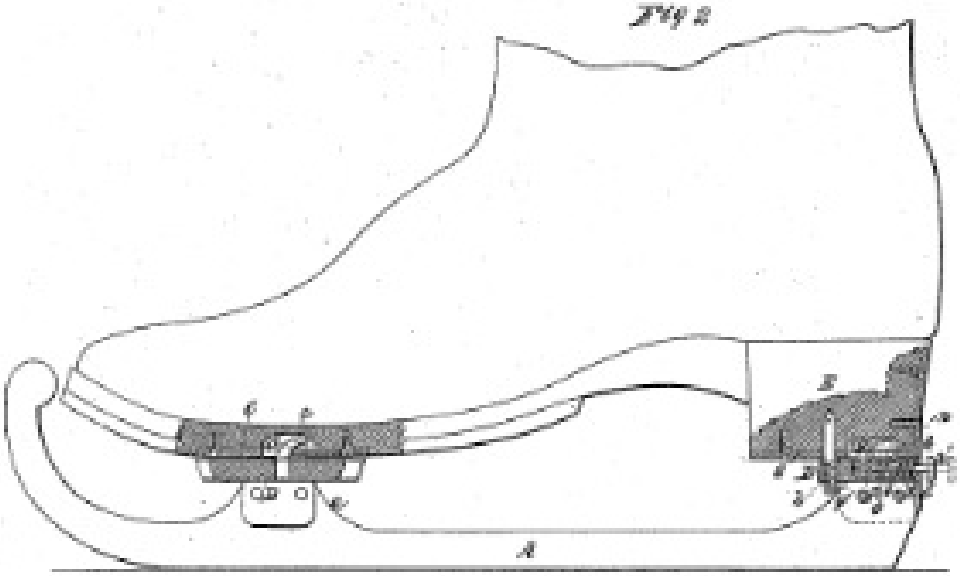

Fig 3

Fig 4.

Witnesses.

Inventor.